XP-002158599

AN - 1993-137113 [17]
A - [001] 014 03& 038 04- 040 143 144 157 175 195 289 308 310 381 541 544 551 56& 560 566 567 573 575 59& 596 652 688 721
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CPY - TOPP
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FS - CPI;GMPI
IC - B29B7/90 ; B29K105/16 ; B29L22/00 ; B65D1/09 ; C08K3/00 ; C08K5/00 ; C08L101/00 ; C08L101/16
KS - 0004 0218 0228 0231 1291 1840 1845 2211 2218 2606 2612 2628 2635 2654 2774 2781 3142 3290
MC - A05-E02 A08-R01 A09-A A12-P06
PA - (TOPP) TOPPAN PRINTING CO LTD
PN - JP3044857B2 B2 20000522 DW200029 C08L101/16 005pp
- JP5070696 A 19930323 DW199317 C08L101/00 005pp
PR - JP19910233106 19910912
XA - C1993-061243
XIC - B29B-007/90 ; B29K-105/16 ; B29L-022/00 ; B65D-001/09 ; C08K-003/00 ; C08K-005/00 ; C08L-101/00 ; C08L-101/16
XP - N1993-104481
AB - J05070696 Plastic container is formed from a compsn. prepd. by adding 10 to 40 wt.% of filler to biodegradable plastic. The filler is in particles having an ave. dia. below 20.0 micron.
- It includes calcium carbonate, hydrated magnesium silicate (talc), etc. The biodegradable plastic includes polyester such as copolymer of poly-3-hydroxybutyrate (3HB), poly-4-hydroxybutyrate (4HB), and polyhydroxyvalerate (PHV), aliphatic polymer such as polycaprolactone, polyglycolide such as polylactic acid, etc. and mixt. of two or more of these polymers. The container includes bottle, cup, etc.
- ADVANTAGE - The container has high elastic modulus and tensile strength, and improved biodegradability even when it has high wall thickness.
- In an example, a bottle made from a 880:20 mixt. of 3HB-3HV copolymer and talc having an ave. particle dia. of 10.0 microns was immersed in a soln. of enzyme refined from penicillium funiculosum IFO 6345 soln. for 24 hrs. and the bottle showed a loss in weight of 32%. Test piece made from the mixt. had a maximum stress of 1.47 kgf/mm2 and an elastic modulus of 136.73 kgf/mm2. (Dwg.0/0)
IW - PLASTIC CONTAINER BOTTLE HIGH ELASTIC MODULUS TENSILE STRENGTH BIODEGRADABLE ADD FILL CALCIUM CARBONATE BELOW MICRON DIAMETER BIODEGRADABLE PLASTIC POLY HYDROXY BUTYRATE
IKW - PLASTIC CONTAINER BOTTLE HIGH ELASTIC MODULUS TENSILE STRENGTH BIODEGRADABLE ADD FILL CALCIUM CARBONATE BELOW MICRON DIAMETER BIODEGRADABLE PLASTIC POLY HYDROXY BUTYRATE
NC - 001
OPD - 1991-09-12
ORD - 1993-03-23
PAW - (TOPP) TOPPAN PRINTING CO LTD
TI - Plastic container e.g. bottl , with high elastic modulus,

tensile-strength and biodegradability - by adding filler .g. calcium carbonate, f below 20 microns dia. to biodegradable plastic e.g. poly-3-hydroxy butyrat